

III. REMARKS

1. Claims 1-13 remain in the application.
2. Applicant appreciates the courtesies extended by the Examiner during the telephone conversation of 26 October 2004.
3. As a result of suggestions made by the Examiner to bring the claims into condition for allowance during this conversation, Applicant has amended claims 1 and 7 to clarify the invention. It is Applicant's understanding that the claims are now in condition for allowance.
4. It is clear from claim 1 that the I and Q components are summed in one signal, that the summed signal frequency is doubled after summing and before frequency detection, and that the doubled frequency signal is detected to form an FM demodulated signal.

The first element of claim 1 as amended states that the radio frequency signal is mixed and summed into a low-frequency signal that includes I and Q components of the radio frequency signal.

The third element of claim 1 states that a second signal is formed on the basis of the edge detection of the low frequency signal, the frequency of the second signal being twice the frequency of the low-frequency signal.

In the fourth element of claim 1, that second signal, having a frequency twice that of the low frequency signal, is frequency detected to form an FM demodulated signal.

5. Claim 7 is amended in a similar manner.

6. Applicant respectfully submits that claims 1-13 are patentable over Ohba et al. (EP 0417528, "Ohba").

In the present invention the signal frequency is doubled before frequency detection so that the I and Q signal components are summed in one signal. Ohba et al., on the other hand, discloses doubling the frequency within the detection function and that the detector uses separate I and Q signals.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,


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Date


28 October 2004

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